

DOCKET FILE COPY ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

ORIGINAL

RECEIVED

APR 23 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of:)

Usage of the Public Switched)
Network by Information Service)
and Internet Access Providers)

CC Docket No. 96-263

REPLY COMMENTS OF GTE

GTE SERVICE CORPORATION,
on behalf of its affiliated companies

Ward W. Wueste
Gail L. Polivy
1850 M Street, N.W.
Suite 1200
Washington, DC 20036

R. Michael Senkowski
Richard T. Pfohl
WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, DC 20006

Its Attorneys

April 23, 1997

No. of Copies rec'd
List A B C D E

0412

GTE Service Corporation
April 23, 1997

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY	1
II. THE RECORD DEMONSTRATES THAT A DRAMATIC INCREASE IN INTERNET TRAFFIC HAS REQUIRED EXTRAORDINARY EFFORTS TO PREVENT DETERIORATION OF NETWORK PERFORMANCE	3
A. Additional Data Collected By GTE Demonstrate That Traffic Levels Have Increased Dramatically Due To A Substantial Rise In Usage Levels On Internet-Related Lines	4
B. LECs Face Significant Increases In Expenditures For Network Upgrades In Order To Accommodate The Increase In Internet-Related Traffic	9
III. SUB-LOOP UNBUNDLING FOR THE USE OF ISPs SHOULD NOT BE MANDATED	11
A. A General Requirement For Sub-Loop Unbundling Would Impair Service Quality And Raise Grave Risks To Network Reliability	12
B. Sub-Loop Unbundling For ISPs Is Particularly Unwarranted	13
IV. GTE CONCURS IN AT&T'S SHOWING THAT INTERNET ACCESS TRAFFIC IS PRESUMPTIVELY INTERSTATE AND SUBJECT TO THE COMMISSION'S JURISDICTION	14
A. The Presumption That Internet Access Traffic Is Interstate In Character Accurately Reflects The Nature Of The Internet	15
B. Mutual Compensation Should Not Apply To Internet Access Traffic In Order To Prevent Gaming Of The System	16
V. THE CURRENT SYSTEM DOES NOT PROVIDE FOR SUFFICIENT RECOVERY OF ACTUAL COSTS BY LECS	17
A. Business Line Rates And Flat-Rated Residential Charges Do Not Provide Sufficient Revenues To Recover ILECs' Actual Costs.	17
B. TELRIC Does Not Provide An Effective Measure Of ILEC Costs For Compensation Purposes	18
C. Failure To Allow Full Recovery Of Costs Will Create A Massive Disincentive To Investment In Data-Friendly Networks.	20
VI. CONCLUSION	23

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20544**

In the Matter of:)	
)	
Usage of the Public Switched)	CC Docket No. 96-263
Network by Information Services)	
and Internet Access Providers)	

REPLY COMMENTS OF GTE

GTE Service Corporation ("GTE"), on behalf of its affiliated companies,¹ hereby submits its reply to comments received in response to the above-captioned Notice of Inquiry ("NOI").²

I. INTRODUCTION AND SUMMARY

Broad record support exists for the positions articulated in GTE's Comments. As the empirical data of GTE and other LEC commenters make clear, Internet access usage is creating the need for unscheduled network upgrades that result in unrecovered costs for ILECs. Additional data recently compiled by GTE confirms GTE's earlier showing that

¹ GTE is a world leader in the provision of wireline, wireless, Internet and directory services.

² *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; Usage of the Public Switched Network by Information Service and Internet Access Providers*, FCC 96-488 (Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry), 1996 FCC LEXIS 7105, 5 Comm. Reg. (P & F) 604 (Dec. 24, 1996).

Internet access-related traffic presents an increasing threat of congestion for ILECs, necessitating dedication of increasing amounts of network capacity. Specifically, a study just completed by GTE indicates that ISP-related traffic constitutes a substantial portion of all terminating interoffice Public Switched Telephone Network ("PSTN") traffic, including a large percentage of such traffic during busy hours. Recovery of costs for this Internet use is both required by the Telecommunications Act and necessary from a public policy standpoint in order to establish proper market-based price signals that will spur deployment of data-friendly networks that the FCC and all commenters agree are desirable.

In contrast, no persuasive arguments have been presented for continuing to require LECs to effectively subsidize Internet access usage. Both the Telecommunications Act and longstanding Commission policy favor recovery of costs from the cost causer, with any necessary subsidies made specific and predictable, not implicit and uncontrollable as here. Moreover, as numerous commenters point out, the current system, which renders much Internet access usage essentially free, is the largest existing regulatory impediment to deployment and use of data-friendly services.

Arguments that the Commission should require sub-loop unbundling for the use of ISPs are similarly misplaced. The severe technical and other constraints on such unbundling render it impracticable to offer, if at all, on anything but an individual case basis. Moreover, even if available, sub-loop unbundling would likely not be an economically viable alternative for ISPs because of the substantial attendant costs. Further, the risk to network reliability from such unbundling would be even greater given the involvement of ISPs, which are not subject to regulatory oversight.

GTE also agrees with AT&T that Internet access usage should be presumptively classified as jurisdictionally interstate. Such a presumption comports with the overwhelmingly interstate character of Internet traffic, but would be rebuttable in order to protect legitimate state interests. Most importantly, the interstate classification of Internet traffic will prevent CLECs from "gaming the system" by signing up ISP customers in order to inflate their receipts of mutual compensation revenues.

Finally, the record establishes that ILECs are currently being denied full recovery of the network costs attributable to increased Internet usage. Neither business line rates nor second line revenues are sufficient to recover these costs. Moreover, application of the FCC's TELRIC standard to Internet access pricing would exacerbate current shortfalls by guaranteeing a systematic under-recovery of costs. Noncompensatory pricing of existing analog services is a principal impediment to the deployment of new data-friendly technologies.

II. THE RECORD DEMONSTRATES THAT A DRAMATIC INCREASE IN INTERNET TRAFFIC HAS REQUIRED EXTRAORDINARY EFFORTS TO PREVENT DETERIORATION OF NETWORK PERFORMANCE

Virtually the only record support relied upon by ISPs for their contention that increases in Internet access usage do not pose a serious risk to the PSTN is the Selwyn/Laszlo Study,³ which was financed by and appended to the Comments of the Internet Access Coalition. As GTE pointed out in its Comments, that study suffers from numerous fatal shortcomings and misconceptions that render its conclusions fundamentally flawed.⁴ Contrary to the suggestions

³ Lee L. Selwyn and Joseph W. Laszlo, "The Effect of Internet Use on the Nation's Telephone Network," Comments of the Internet Access Coalition, Append. C.

⁴ See Comments of GTE at 14-20.

of Selwyn, *et al.*, traffic congestion created by burgeoning levels of Internet access traffic now poses an unprecedented threat to network performance. The dearth of examples of Internet-related network breakdowns to date does not undermine this fact. Rather, serious service disruptions have been avoided only due to ILECs' efforts to implement massive, uncompensated emergency capital upgrades as stopgaps against network overload.

Network congestion caused by increasing Internet use cannot be "simpl[y]" or "easily" addressed through techniques such as load balancing, switch deloading, and use of trunk-side terminations, as certain commenters claim.⁵ As GTE explained in detail in its Comments, such contentions misunderstand telephone network architecture and ignore the significant costs of the technology required to implement network capacity augmentation techniques.⁶ Both additional data collected by GTE and the experiences of other ILECs confirm GTE's earlier showings in this regard.

A. Additional Data Collected By GTE Demonstrate That Traffic Levels Have Increased Dramatically Due To A Substantial Rise In Usage Levels On Internet-Related Lines

A study commissioned by GTE confirms the conclusions of preliminary data set forth in GTE's Comments: Internet-related traffic constitutes an increasing proportion of PSTN traffic, and such traffic is contributing to PSTN congestion problems during both busy and off-peak hours. The study, performed using a commercially available link monitoring system, measured the traffic on the SS7 ("Signaling System 7") links into the three central offices in

⁵ See, e.g., Comments of Internet Access Coalition at 10-14.

⁶ Comments of GTE at 14-22.

the Tampa, Florida metropolitan region during one full week in April, 1997.⁷ All traffic routed to these three central offices was measured to determine the traffic load destined for the ISPs served by these offices as well as non-ISP traffic load.⁸ The study measured the load of calls measured in CCS,⁹ a product of the number and duration of calls.¹⁰

The study illustrates the contribution of Internet access related traffic to terminating interoffice PSTN traffic congestion in the metropolitan area studied, both in peak and off-peak hours. As the following table demonstrates, during the five consecutive weekdays studied, ISP traffic constituted fully **40.75%** of total terminating interoffice PSTN traffic. (See Table 1).¹¹

⁷ The study measured the traffic destined for these central offices 24 hours a day for the seven day period from April 13, 1997 through April 19, 1997.

⁸ The study did not measure intra-office traffic, *i.e.*, traffic originating and terminating within the office studied.

⁹ As explained in GTE's Comments, CCS, or "centum or hundred call seconds," measures actual traffic loads, by measuring the volume *and* duration of calls. Comments of GTE at 11 n.13. This measure is most important, because it determines the load on the network.

¹⁰ The study data shows the hour in the day that calls were connected and the average holding time for all calls that were connected during that hour regardless of the actual release time. It also shows the CCS load to each of the ISP numbers during the hour as well as the CCS load to all other numbers served by the studied offices. Traffic measured includes all of the traffic originated from all of the offices in the surrounding local calling area, traffic terminating in these offices from offices that generate 1+7D Intra-LATA toll calls into these offices, and traffic terminating in these offices from points outside the LATA.

¹¹ Table 1 replicates the Table presented on the basis of preliminary data in GTE's Comments, and validates the conclusions drawn from that table. See Comments of GTE at 13.

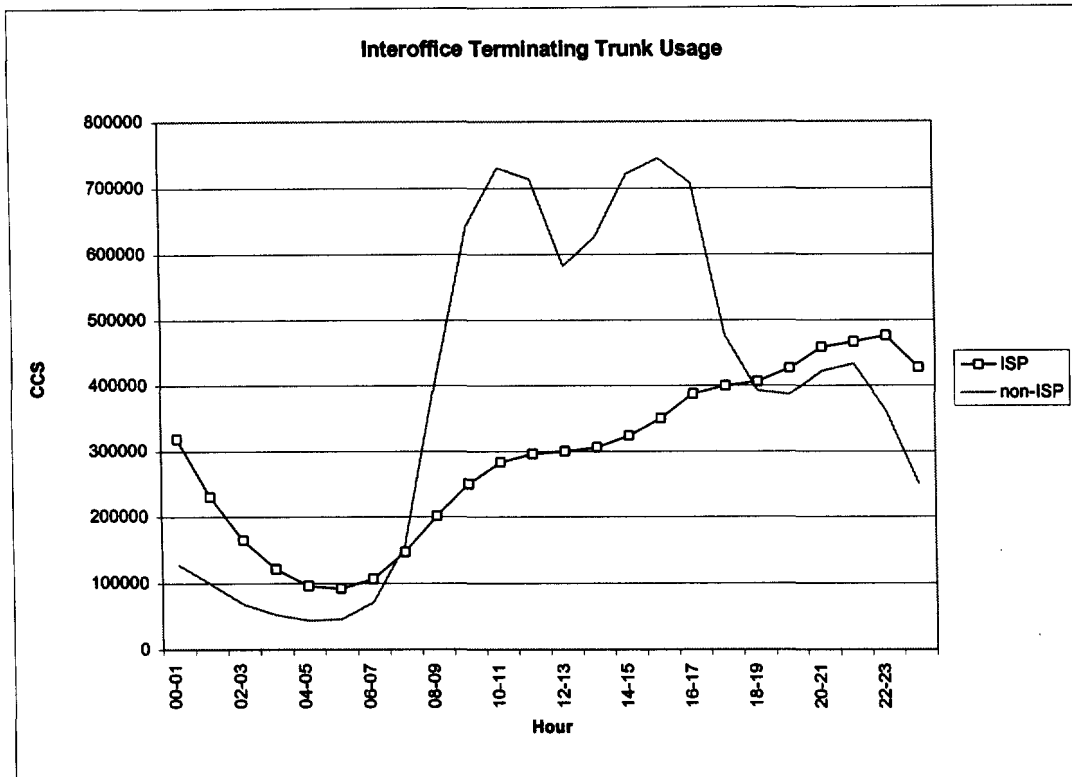
Table 1
March 1997 Study
Five Weekdays Studied

	Completed Calls	Duration in Minutes	Average Holding Time in Minutes	Non- Completed Calls	Percent Completed Calls	Percent of Total Traffic Minutes
ISP Traffic	347,280	8,629,908	24.85	155,988	69.00%	40.75%
Non-ISP Traffic	4,958,065	12,543,904	2.53	1,881,457	72.50%	59.25%
Total Traffic	5,305,345	21,173,812	3.99	2,037,445	72.25%	100%

Furthermore, contrary to the unsupported contentions of a number of ISP commenters,¹² Internet access-related traffic was significant not only during off-peak hours, but during PSTN busy hours as well. During the peak busy hour, ISP traffic constituted nearly 33% of total terminating interoffice PSTN traffic. (See Chart 1).

¹² See, e.g., Comments of WorldCom at 19-20; Comments of General Services Administration ("GSA") at 13-15; Comments of The Association of Online Professionals at 4; Comments of Internet Access Coalition at 8-9.

Chart 1

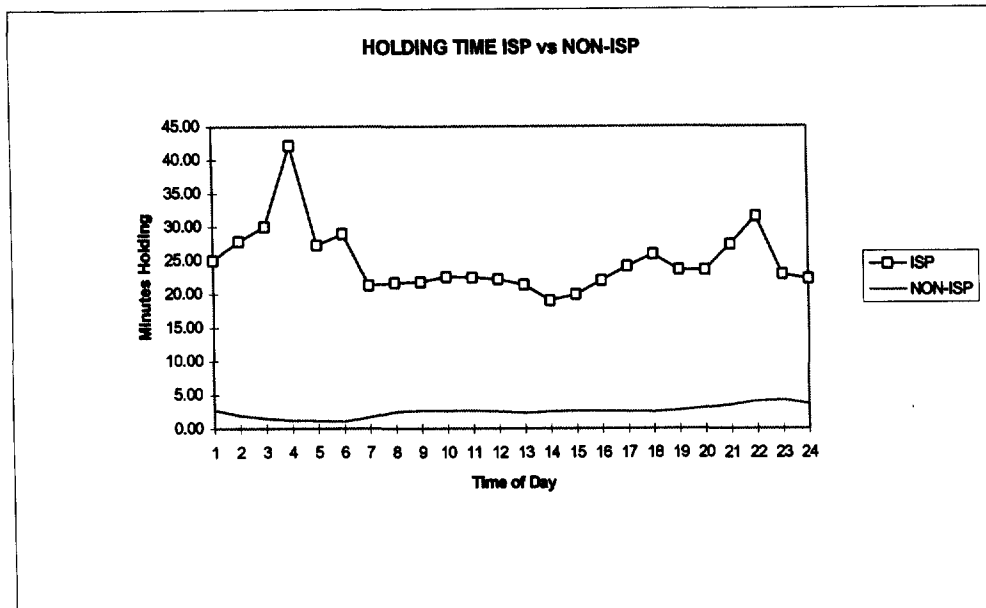


As Chart 1 demonstrates, ISP traffic load increases steadily during the day from 5:00 A.M. until 11:00 P.M (with a slight flattening at noon). ISP traffic load during the busy hour (3:00 - 4:00 P.M.) is equivalent to approximately 73% of ISP traffic load during the ISP busy hour (10:00 - 11:00 P.M.).

Furthermore, the study data demonstrates that ISP contentions regarding total number/volume of calls during the busy hour are, in and of themselves, incorrect. As Chart 2 illustrates, average holding time during busy hours on calls to ISPs is nearly *nine times* longer than average holding time on non-ISP traffic in this metropolitan network. (See Chart 2).¹³

¹³ See also Table 1; Affidavit of H. Lee Jones, attached as Append. A, at 2.

Chart 2



Holding times are relevant, because it is both the number and the duration of calls that determine call load, network congestion, and switch and trunk line capacity needed.¹⁴ For example, GTE's data demonstrates that ISP calls during the busy hour constituted nearly 33% of total terminating interoffice traffic load, despite constituting only 4.35 percent of the total number of completed terminating interoffice calls during that hour. Therefore, it is clear that the long average holding time of ISP traffic is largely responsible for causing the need for

¹⁴ See Affidavit of H. Lee Jones, attached as Append. 1, at 3; *see also* Comments of WorldCom at 19 (admitting that "the ILECs' local switches typically are engineered based on the number of lines, expected call attempts per busy hour, and call holding time.")

Contrary to the contention of the GSA, Comments of GSA at 12-13, volume and duration of calls, rather than amount of information transmitted, are the relevant factors in determining burden on the PSTN. The circuit switched nature of the PSTN requires occupation of a circuit during the entire connection time, unlike in a packet switched environment.

additional facilities in the network. Thus, ISP data that relates solely the volume of calls and fails to address call duration or total call load presents a one-dimensional slice that is, at best, irrelevant and, at worst, misleading.

B. LECs Face Significant Increases In Expenditures For Network Upgrades In Order To Accommodate The Increase In Internet-Related Traffic

The additional data collected by GTE are consistent with the findings described in the comments of GTE and other LECs, which demonstrate that ILECs have been forced to incur significant, uncompensated increases in expenditures for network upgrades in order to accommodate the rise in Internet access traffic. As GTE noted in its comments, its operating companies have already committed between \$50 million and \$85 million, due solely to increased Internet access traffic, in order to avoid a potentially crippling overload of its network.¹⁵

The Comments of other ILECs confirm GTE's experience. For example, Pacific Telesis found that at the end of 1996, Internet usage accounted for approximately 27 percent of Pacific Bell's total residential traffic, or 30 billion minutes of use.¹⁶ If the exemption is not removed, Pacific Telesis forecasts that by 2001, there will be almost as much residential dial-up Internet traffic as residential voice traffic.¹⁷ Moreover, Pacific Telesis expects that Pacific Bell will generate about \$150 million in incremental revenue from ISPs but spend over \$300

¹⁵ Comments of GTE at 22.

¹⁶ Comments of Pacific Telesis Group at 10.

¹⁷ *Id.*

million to support Internet-related traffic over the next five years.¹⁸ As Pacific Telesis notes, because of the disincentives to recovery of costs invested in data networks, these funds will be misdirected to investment in voice public switched networks rather than development of advanced data services.¹⁹

Similarly, Bell Atlantic alone spent nearly \$200 million above its planned network construction budget in 1996 to avoid failures that would impair service to all customers.²⁰ Bell Atlantic expenditures in 1997 are expected to exceed \$300 million, including installation of a large number of new line units and ISDN terminations in central office switches to accommodate additional traffic volumes, and interoffice trunks to carry the traffic between offices.²¹ Sprint likewise has experienced Internet-related congestion problems that have required hundreds of thousands of dollars in network expansions to resolve.²²

Furthermore, new Internet technologies now being implemented are expected to exacerbate the congestion problem. For example, "push" technology will require that the end-user remain connected to the Internet program source during the entire time that the customer's computer is turned on.²³ This technology is likely to increase holding times

¹⁸ *Id.* at 31.

¹⁹ *Id.*

²⁰ Jt. Comments of Bell Atlantic and NYNEX at 6.

²¹ *Id.*

²² See Comments of Sprint Corp. at 5 (Sprint LECs have been required to spend between \$350,000 and \$400,000 to add additional trunks to address spikes in traffic levels each time a major Internet access provider has offered flat-rate service to the Internet).

²³ Jt. Comments of Bell Atlantic and NYNEX at 8-9. "Push" technology sends

(Continued...)

GTE Service Corporation
April 23, 1997

dramatically, as well as require far higher emergency investment in existing networks to prevent congestion.²⁴

As the data provided by GTE and by other commenters make clear, ample evidence of the increase in network traffic and congestion problems exists to warrant FCC action. Calls for the collection of additional information or other deferrals of FCC action²⁵ are simply delay tactics to maintain preferential treatment of ISPs and should not be credited.²⁶ Instead, the Commission should move expeditiously to address this real and growing concern.

III. SUB-LOOP UNBUNDLING FOR THE USE OF ISPs SHOULD NOT BE MANDATED

A number of ISPs and other commenters have suggested that ILECs should be required to provide them with unbundled access to various parts of the local loop such as feeder and distribution facilities.²⁷ However, as the Commission has previously found, it is not possible to provide sub-loop unbundling on a generic basis due to serious network reliability

(...Continued)

predetermined types of information to the end user's computer without the end user having to retrieve it. It requires that the end user remain connected to the Internet during the entire time the end user's computer is turned on, in order for the information to be "pushed" to that computer as soon as it is available -- with consequential dramatic increases in holding times.
Id.

²⁴ *Id.*

²⁵ *See, e.g.*, Comments of Internet Access Coalition at 61; Comments of Association of Online Professionals at 4.

²⁶ *See* Comments of AT&T at 19.

²⁷ *See, e.g.*, Comments of America Online at 24-25; Comments of Internet Access Coalition at 41-42; Comments of WorldCom at 23-24.

concerns.²⁸ Nor is it likely to be an economically viable distribution option for ISPs.

Accordingly, sub-loop unbundling should not be required herein.

A. A General Requirement For Sub-Loop Unbundling Would Impair Service Quality And Raise Grave Risks To Network Reliability

The FCC properly declined to require sub-loop unbundling in its First Interconnection Order on the grounds that proponents of sub-loop unbundling could not adequately respond to the network reliability concerns raised by various ILECs.²⁹ As GTE explained in its Comments in that proceeding, it is impossible to establish a uniform national requirement for sub-loop unbundling for a number of reasons:

- There are literally dozens of different loop provisioning configurations, each engineered for network integrity purposes as an end-to-end transmission path and frequently lacking any cross-connect box or other demarcation between the feeder and distribution portions of the plant at which a generic unbundling requirement could be implemented.
- There are no industry standards governing what combinations of network elements are used to create a local loop or even the appropriate delineation between feeder and distribution plant.
- Existing ILEC operations support systems are not designed or configured to support the separate provisioning of sub-loop facilities.
- The cost of making available a sub-loop facility for provisioning will vary widely depending upon the network configuration.
- Because there is a lack of compatibility between the different types of analog and digital transmission services that may be provided via local loops, there is a severe

²⁸ Thus, to the extent that sub-loop unbundling is proposed as a precondition to addressing the issue of usage of the PSTN by ISPs, it is a mere delaying tactic and should be dismissed out of hand.

²⁹ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 (Aug. 8, 1996)("First Interconnection Order"), ¶ 391.

risk of inter-service interference from uncoordinated usage of sub-loop facilities due to lack of spectrum management.

- Because of the complexity of feeder-distribution interfaces resulting from the thousands of cross-connects required at each box, the introduction of new or additional installation and maintenance personnel into such sites for provisioning purposes will increase the potential for service degradation or failure and, thereby, undermine network reliability.

As a result of these factors, the viability of providing any unbundled sub-loop facilities must be considered on a specific, individual case basis. Only where: (i) the necessary facilities exist, (ii) procedures for provisioning and coordinated use can be established, and (iii) the requester agrees to pay all associated costs, can the availability of a sub-loop product even be considered. GTE's experience suggests that these situations will be exceedingly few in number.³⁰ Although the Commission has indicated that it will further review the question of sub-loop unbundling in 1997,³¹ the record here is clearly inadequate to support a reversal of the agency's earlier determinations in this regard.

B. Sub-Loop Unbundling For ISPs Is Particularly Unwarranted

In the Telecommunications Act, Congress established the rights of regulated *carriers* to acquire unbundled network elements from ILECs for the purpose of creating new competitive alternatives for users. The limitation to carriers is clearly reasonable given the inherent risks to service to the public associated with permitting entities to piece out the ILECs'

³⁰ The FCC has required CLECs to bear the cost of any higher than normal quality network elements they request. Thus, if the Commission were to grant the Internet Access Coalition's related request for authority to acquire digitally conditioned loop facilities (Comments at 45-46), the ISP would be required to pay the cost of such conditioning, equipment removal or other reconfiguration in that circumstance as well.

³¹ First Interconnection Order, ¶ 391.

communications networks in order to integrate their own facilities. For obvious reasons, providing such a right to ISPs, which are not subject to governmental oversight, would present an even greater risk to the network and the services provided to others without offering any such pro-competitive justification. The risks would be particularly great in the context of sub-loop unbundling.

Absent the imposition of similar regulatory responsibilities upon both parties to a sub-loop provisioning arrangement, it will be impossible to obtain the necessary level of assurance that the risks identified above can be avoided or that, if problems occur, they will be promptly remedied. The burden of enforcement would fall solely on the ILEC, and its customers would bear the costs. This would be both manifestly unfair and ill-advised as a matter of public policy.

IV. GTE CONCURS IN AT&T'S SHOWING THAT INTERNET ACCESS TRAFFIC IS PRESUMPTIVELY INTERSTATE AND SUBJECT TO THE COMMISSION'S JURISDICTION

GTE concurs in the Comments of AT&T that the Commission should adopt a rebuttable presumption that Internet access services are subject to the Commission's jurisdiction due to their overwhelmingly interstate character.³² Such a presumption comports with the characteristics of Internet traffic and with settled case law for regulating services that, like Internet traffic, have a significant interstate use or character but cannot readily be broken down into distinct interstate and intrastate components.³³

³² See Comments of AT&T at 28.

³³ See, e.g., *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 375-79 (1986); *Cal. v. FCC*, 39 F.3d 919, 931-33 (9th Cir. 1994), *cert. Denied*, 115 S. Ct. 1427 (1995); *Pub. Utility*

(Continued...)

A. The Presumption That Internet Access Traffic Is Interstate In Character Accurately Reflects The Nature Of The Internet

Internet access traffic is overwhelmingly interstate in character, and even where this is not the case, customers will almost inevitably access multiple applications and databases during a typical session, a large fraction of which are likely to involve interstate transmission.³⁴ The use of new "push" technologies will further reinforce the interstate character of Internet transmissions. In any event, the predominant interstate and, indeed, international scope of the Internet clearly warrants treatment of Internet access arrangements under uniform policies established *and administered* at the federal level.

As pointed out by U S WEST, the current regime results in a massive allocation of costs to the intrastate jurisdiction,³⁵ but states are limited in their flexibility to recover those costs from the cost causers. This jurisdictional mismatch of costs and cost recovery has fostered the current noncompensatory predicament facing ILECs and presents a major disincentive to the deployment of new data-friendly technologies.³⁶ Given the Commission's and the nation's interest in promoting the Internet and related offerings, it would clearly be reasonable for the agency to assert an appropriate level of federal jurisdiction in this context.

(...Continued)

Comm'n of Texas v. FCC, 886 F.2d 1325, 1331-34 (D.C. Cir. 1989).

³⁴ See Comments of AT&T at 28-30.

³⁵ See Comments of U S WEST at 22.

³⁶ Furthermore, this creates, in effect, a reverse subsidy in which costs of predominantly interstate service are recovered in intrastate rates. Such an outcome is wholly inconsistent with the historical policy of subsidizing local service through interstate rates.

Nonetheless, GTE also agrees with AT&T that the presumption that particular Internet access traffic is jurisdictionally interstate could be rebutted by a convincing showing that the traffic is, in fact, intrastate in character. Such a showing could be based on traffic studies, network design, server locations, or other factors analogous to those used to dispute classification of dedicated line services under the Joint Board's jurisdictional allocation regime.³⁷ In this manner, legitimate state prerogatives would not be trampled.

B. Mutual Compensation Should Not Apply To Internet Access Traffic In Order To Prevent Gaming Of The System

As GTE noted in its Comments, competitive LECs are currently marketing their offerings to Internet access providers and other ISPs for the sole purpose of capturing those entities' overwhelmingly terminating traffic in order to obtain transport and termination charges from LECs under reciprocal local compensation arrangements.³⁸ Other commenters confirm the existence of such practices.³⁹ If CLECs are successful in this attempt, ILECS will remain responsible for the vast majority of the network cost increases caused by Internet access usage, incur a new cost burden in terminating payments to CLECs, and lose all revenues from ISPs themselves.

CLECs should not be permitted to game the system in this manner or otherwise allowed to take advantage of arbitrage possibilities that lack any reasonable technological or

³⁷ See Jt. Comments of Bell Atlantic and NYNEX at 14 n.25 (similarly arguing that the FCC should follow its "10 percent rule").

³⁸ Comments of GTE at 32-33.

³⁹ See Comments of Pacific Telesis Group at 21; Jt. Comments of Bell Atlantic and NYNEX at 9.

economic basis. Rather, costs should be recovered from those who cause them to be incurred. When public policy determines that end users are entitled to below cost services, appropriate mechanisms should be established that explicitly recover the costs associated with the subsidized services. Classification of Internet traffic as interstate, interexchange usage will further this goal by ensuring that this traffic is not subject to mutual compensation arrangements.⁴⁰

V. THE CURRENT SYSTEM DOES NOT PROVIDE FOR SUFFICIENT RECOVERY OF ACTUAL COSTS BY LECS

A. Business Line Rates And Flat-Rated Residential Charges Do Not Provide Sufficient Revenues To Recover ILECs' Actual Costs.

The ISP access charge exemption effectively precludes ILECs from recouping their substantial costs in network investments, thereby creating an implicit subsidy system in contravention of sound economic and regulatory policy, as well as applicable legal requirements.⁴¹ GTE explained in its comments that current rates business and residential telephone do not adequately compensate ILECs for services provided to ISPs. Other

⁴⁰ See First Interconnection Order, ¶ 1034.

⁴¹ As the Commission observed in another proceeding:

Carriers under the Commission's jurisdiction must be allowed to recover the reasonable costs of providing service to ratepayers, including reasonable and prudent expenses and a fair return on investment. This fundamental requirement is unchanged by the Telecommunications Act of 1996.

Accounting for Judgments and Other Costs Associated with Litigation, CC Docket No. 93-240, FCC 97-80, ¶ 2 (rel. Mar. 13, 1997)(citation omitted).

commenters agree that second-line revenues and business line rates are insufficient to recover ILEC costs.⁴²

In any event, no statistical support exists for the ISPs' claim that the demand for second lines is primarily caused by Internet use or that second line revenues should be credited to Internet traffic.⁴³ The proliferation of facsimile technology, telecommunicating, children's lines, and a host of other uses all contribute to the increase in use of residential second lines. As GTE has explained, where Internet traffic is involved, the additional revenue is insufficient to compensate for the increased usage, particularly given the lack of vertical services purchased on such lines.

B. TELRIC Does Not Provide An Effective Measure Of ILEC Costs For Compensation Purposes

Contrary to the suggestions of a number of ISPs and other commenters who have an interest in perpetuating ILECs' subsidization of ISPs,⁴⁴ TELRIC, or "total element long-run incremental costs," does not provide an appropriate measure of the actual costs of the communications services utilized by ISPs. Under the Commission's TELRIC standard, prices would be set based solely on the incremental forward-looking costs of a hypothetical, ideally

⁴² See Comments of Southwestern Bell at 11 (revenues received from second lines used to access the Internet do not recover their costs); Comments of GTE at 24-25; Jt. Comments of Bell Atlantic and NYNEX at 10 n.19 (although some customers may pay message units for originating calls, there is no usage charge for terminating traffic, and message unit charges fall far short of compensating for delivering Internet access traffic). See generally Comments of GTE, CC Docket No. 96-98 ("GTE Interconnection Comments").

⁴³ See Jt. Comments of Bell Atlantic & NYNEX at 10-11.

⁴⁴ See, e.g., Comments of CompuServe & Prodigy at 12; Comments of AT&T at 25-26; Comments of MCI at 6.

efficient, state-of-the-art network.⁴⁵ It would, thus, preclude recovery of the actual costs of ILEC operations.⁴⁶ For these reasons, the U.S. Court of Appeals for the Eighth Circuit has tentatively concluded that TELRIC pricing is unlawfully non-compensatory.⁴⁷

Application of TELRIC would also provide a disincentive to development of state-of-the-art data-friendly networks, contrary to the professed goals of the FCC and all commenters. It would be irrational for any competitor to build its own facilities when the FCC has guaranteed it a right to use the incumbent's facilities at the incremental cost of the best up-to-the-moment technologies. No entrant can hope to be more efficient - and to achieve lower cost - than the hypothetical, ideally-efficient network contemplated by TELRIC. As a consequence, no new entrant will incur the expense or take the risk of building facilities of its own.⁴⁸

Application of a TELRIC-based Internet pricing methodology to access services would likewise discourage incumbent LECs from investing in their own networks. On any given

⁴⁵ First Interconnection Order, ¶¶ 685, 690.

⁴⁶ *See id.* ¶¶ 672, 204-07.

⁴⁷ *Iowa Utilities Bd. V. FCC*, No. 96-3321, 1996 WL 589204 (8th Cir. Oct. 15, 1996). For similar reasons, the assertion by the Commercial Internet Exchange Association ("CIX") that business line rates must be compensatory because they exceed the FCC's prescribed TELRIC-based proxy prices for comparable functionality is wholly without foundation. *See* Comments of CIX at 12.

⁴⁸ MFS, for example, announced plans last fall to "re-orient [i]ts network build-out focus away from building to end-users . . . connect [i]customer via incumbent local exchange carrier (ILEC) unbundled loops." *MFS Communications*, Merrill Lynch Capital Markets, Nov. 7, 1996, at 2. *See also, London On The Line*, The Washington Post (Nov. 10, 1996) (British Telecom has no plans to build facilities of its own here but instead will "purchase bulk capacity from local telephone carriers" and thereby "leverage other people's infrastructure").

day, regulators would always be able to hypothesize technology that is more efficient than what an incumbent LEC was able to purchase yesterday.⁴⁹ TELRIC pricing would, thus, guarantee a systematic under-recovery of costs for incumbent LECs and, thereby, simply perpetuate the current cost recovery crisis.⁵⁰

C. Failure To Allow Full Recovery Of Costs Will Create A Massive Disincentive To Investment In Data-Friendly Networks.

GTE submits that the principle of payment of actual costs should apply equally to ISPs as it does to other carriers and service providers. The current contrary practice creates a direct *disincentive* to development of data-friendly, packet-switched networks that can adequately accommodate increased Internet usage.⁵¹ As GTE noted in its Comments, Internet access usage of local business lines is effectively subsidized, because such lines generate few outgoing calls, instead receiving calls from ISP customers and paying only the basic flat rate portion of the business line charges.⁵² This subsidy, which results in the provision of

⁴⁹ See Declaration of Alfred E. Kahn and Timothy J. Tardiff, ¶ 8(a), filed with the Reply Comments of Bell Atlantic, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, FCC 96-328 (May 30, 1996) (Appendix at 63).

⁵⁰ See Affidavit of Jerry Hausman, ¶¶ 5-8, filed with the Reply Comments of the United States Telephone Ass'n, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, FCC 96-328 (May 30, 1996) (Appendix at 81).

⁵¹ See Comments of AT&T at 5, 16, 18-19. The Commercial Internet Exchange Association is simply wrong in arguing that ISP affiliates of LECs are, unlike their ISP competitors, unaffected by access charges, because such charges are "a mere accounting entry between affiliated companies." Comments of CIX at 19. LECs are precluded by their Cost Allocation Manuals, *i.e.*, the Docket 86-111 rules, from cross subsidizing between regulated and nonregulated services.

⁵² See Comments of GTE 23. The vast majority of ISPs' largely residential customers, in turn, also use flat-rated local services to access their Internet offerings. *Id.*

effectively "free" incremental service to ISPs, retards the development of data-friendly networks,⁵³ contrary to what the FCC⁵⁴ and *all* commenters agree is the preferable means for supporting Internet-related traffic.

This conclusion is confirmed by the experience of Bell Atlantic. Since Bell Atlantic has begun offering its new packet-based Internet access service, no ISPs have subscribed.⁵⁵ Thus, the FCC's current practice provides ISPs with a direct and massive economic incentive to continue to rely upon local business lines using voice-based PSTN, rather than supporting investment in data-based packet-switching networks. Such a result directly undermines

(...Continued)

ISPs' one-way directionality, together with their call volumes and holding times -- which, as the experience of LECs to date illustrates, *see supra*, Section II, makes them a particularly heavy burden upon LECs without a proportional increase in revenue -- distinguish ISPs from other business users. Thus, WorldCom's contention that because local business rates include a universal service subsidy, ISPs must be paying more than their fair share of costs, Comments of WorldCom at 15, fails entirely to recognize the unique characteristics of ISP use. Although average business customers do subsidize residential customers, since LECs realize no margin above cost when serving ISPs, no such subsidy exists. In any event, any universal service subsidy is directed to universal service, and is therefore not available to LECs to defray ISP use.

GSA's claim that ISPs and business user customers of local exchange services pay local message charges for all voice and data messages that transit local networks, Comments of GSA at 16, is incorrect. Businesses do not pay message charges to terminate traffic. Similarly, GSA's assertions that local usage is "almost invariably" priced "far in excess of incremental cost," and that the incremental costs of furnishing additional lines to residential users are "extremely low," are unsupported.

⁵³ Comments of AT&T at 19; Comments of Pacific Telesis Group at 35; Comments of US WEST at 26.

⁵⁴ NOI, ¶ 313.

⁵⁵ Jt. Comments of Bell Atlantic & NYNEX at 13. Other ILEC-offered packet access services have similarly failed to attract significant interest from unaffiliated ISPs. Comments of MCI at 10.

Congress' express intention in passing the 1996 Act to "accelerate rapidly private sector deployment of advanced telecommunications [] and information technologies,"⁵⁶ as well as the FCC's goal to "create incentives for the deployment of services and facilities to allow more efficient transport of data traffic to and from end users."⁵⁷

GTE agrees with commenters that the Commission's rules and policies should "encourage service providers to take business risks and make capital investments in data communications technologies that respond to consumer demand,"⁵⁸ and that investments should be based on the anticipation of future revenues generated by new or improved services.⁵⁹ GTE notes however, that: i) risk is always related to pricing, but ILECs have been denied the opportunity to adjust prices to reflect risk; and ii) ILECs are unable to realize any further revenues as long as the access service charge exemption is in place. Current FCC rules provide a disincentive to invest in long-term facilities that have no potential to produce future revenues.⁶⁰ Only by allowing prices to reflect underlying costs, making subsidies explicit, eliminating unreimbursed subsidies, and giving ILECs necessary pricing flexibility can the FCC encourage ILECs to assume the appropriate risks of building new networks for Internet-related traffic..

⁵⁶ H.R. Conf. Rep. No. 104-458, at 113 (1996).

⁵⁷ NOI, ¶ 313.

⁵⁸ Comments of Internet Access Coalition at 4.

⁵⁹ Comments of General Services Administration at 10.


⁶⁰ Cf. Jt. Comments of Bell Atlantic and NYNEX at 5.

VI. CONCLUSION

GTE again urges the Commission to promulgate a consistent and comprehensive pricing policy to govern all jurisdictionally interstate services. Such a pricing policy should permit LECs to recover their actual costs from cost causers and ensure that all users, service applications, and technologies are subject to correct, cost-based economic signals, so that rational investment choices can be made that will best promote the development of an efficient, economical, and technologically advanced network.

Respectfully submitted,

GTE SERVICE CORPORATION,
on behalf of its affiliated companies



Ward W. Wueste
Gail L. Polivy
1850 M Street, N.W.
Suite 1200
Washington, DC 20036



R. Michael Senkowski
Richard T. Pfohl
WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, DC 20006

April 23, 1997